



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT

PREPARED FOR THE

MUNICIPALITY OF RHINELAND

**BLUMENGART HUTTERIAN MUTUAL
CORPORATION**

S ½ of Section 22-2-3 WPM

TRC 12-109

April 25, 2025

A. INTRODUCTION – THE TEAM

The Technical Review Committee (TRC) is supported by the following department personnel:

Agriculture (AGR)

- Agri-Resource Engineer
- Business Development Specialists
- Veterinarians
- Agri-Ecosystem Specialists

Natural Resources and Indigenous Futures (NRIF)

- Crown Lands Manager
- Fish Habitat Specialist
- Habitat Mitigation Biologist

Environment and Climate Change (ECC)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist
- Land-Water Specialist
- Groundwater Specialist

Manitoba Transportation and Infrastructure (MTI)

- Senior Development Review Technologist
- Senior Flood Protection Planning Officer

Municipal and Northern Relations (MNR)

- Community Planners

And any other specialist or department that may have an interest or is consulted during the TRC process.

THE TECHNICAL REVIEW COMMITTEE (TRC) REPORT

Purpose of TRC Reports

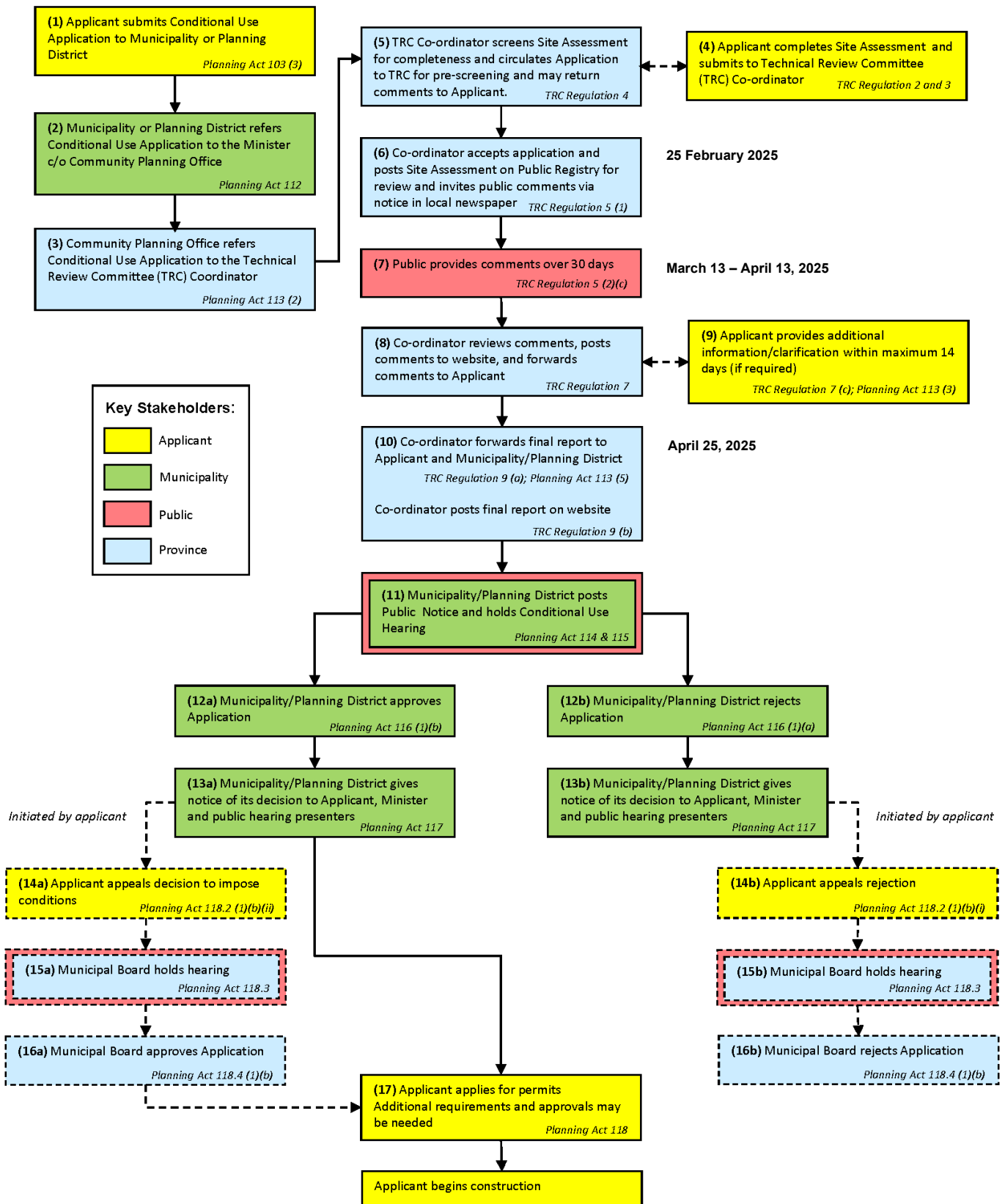
To provide objective, credible, technically-based assessments that:

- a) Enable municipal councils or planning district boards to make informed decisions regarding Conditional Use applications;
- b) Create common stakeholder understanding regarding livestock proposals, their potential impacts, and related regulatory requirements and safeguards;
- c) Provide a vehicle/forum that enables the sharing of public concerns and proponent responses;
- d) Offer recommendations to both councils/boards and proponents; and
- e) Represent the fulfillment of the TRC's role, as per 116(1)(b)(i) of The Planning Act – to determine, based on available information, that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measure and safeguards.

Should a municipal council or planning district board provide conditional approval of a proposal, the project proponent may be required to obtain various permits and licenses from the Province to address in greater detail environmental aspects of the proposal. As of November 1, 2019, a proponent may appeal a council/board's rejection of their application or appeal a condition imposed on the approval of a council/board to the Municipal Board.

Livestock Technical Review Process

(June 19, 2024)



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

Further information may be found at https://www.gov.mb.ca/mr/livestock/public_registries.html

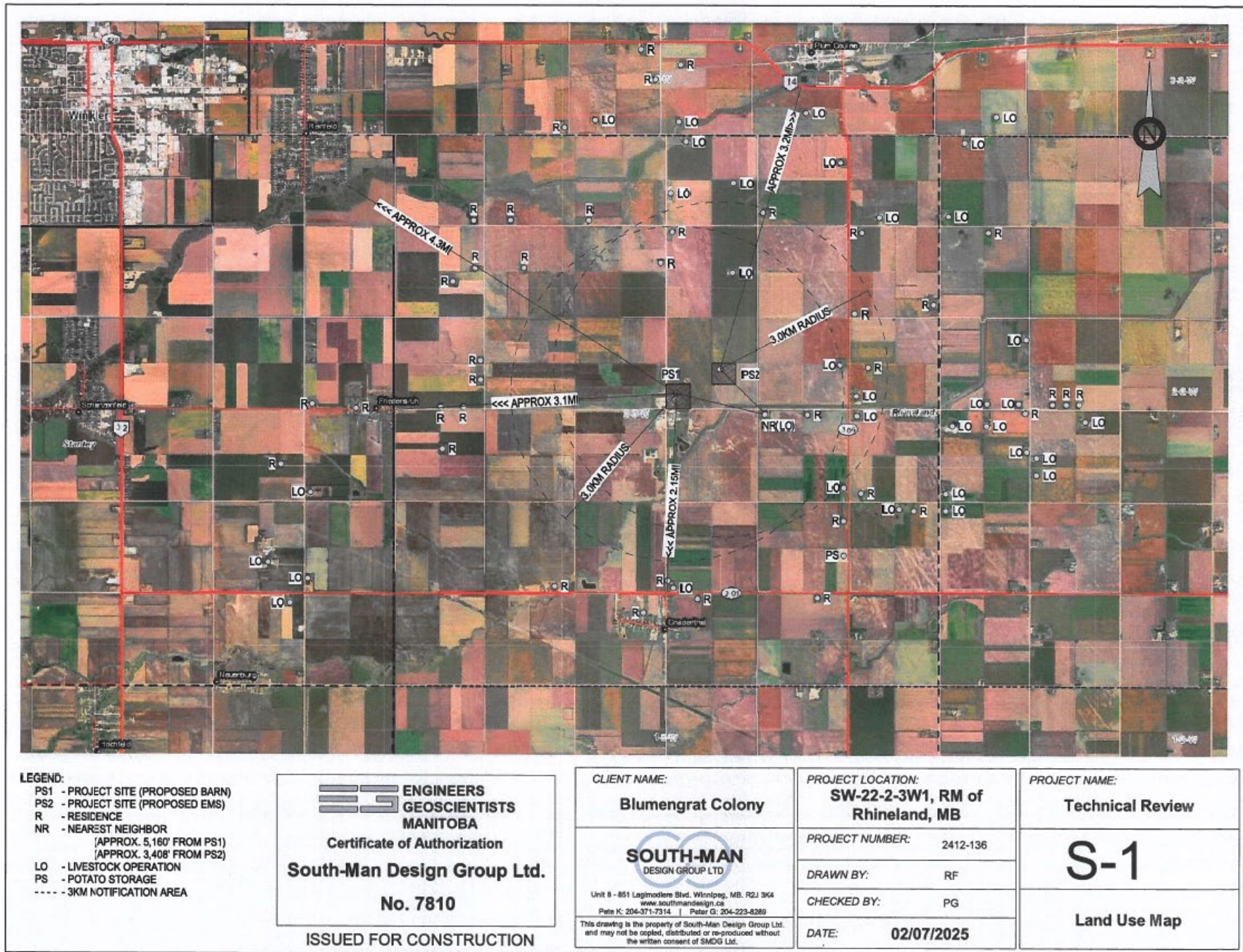
Applicant: Blumengart Hutterian Mutual Corp.

Site Location: S ½ of Section 22-2-3 WPM (Refer to map below)

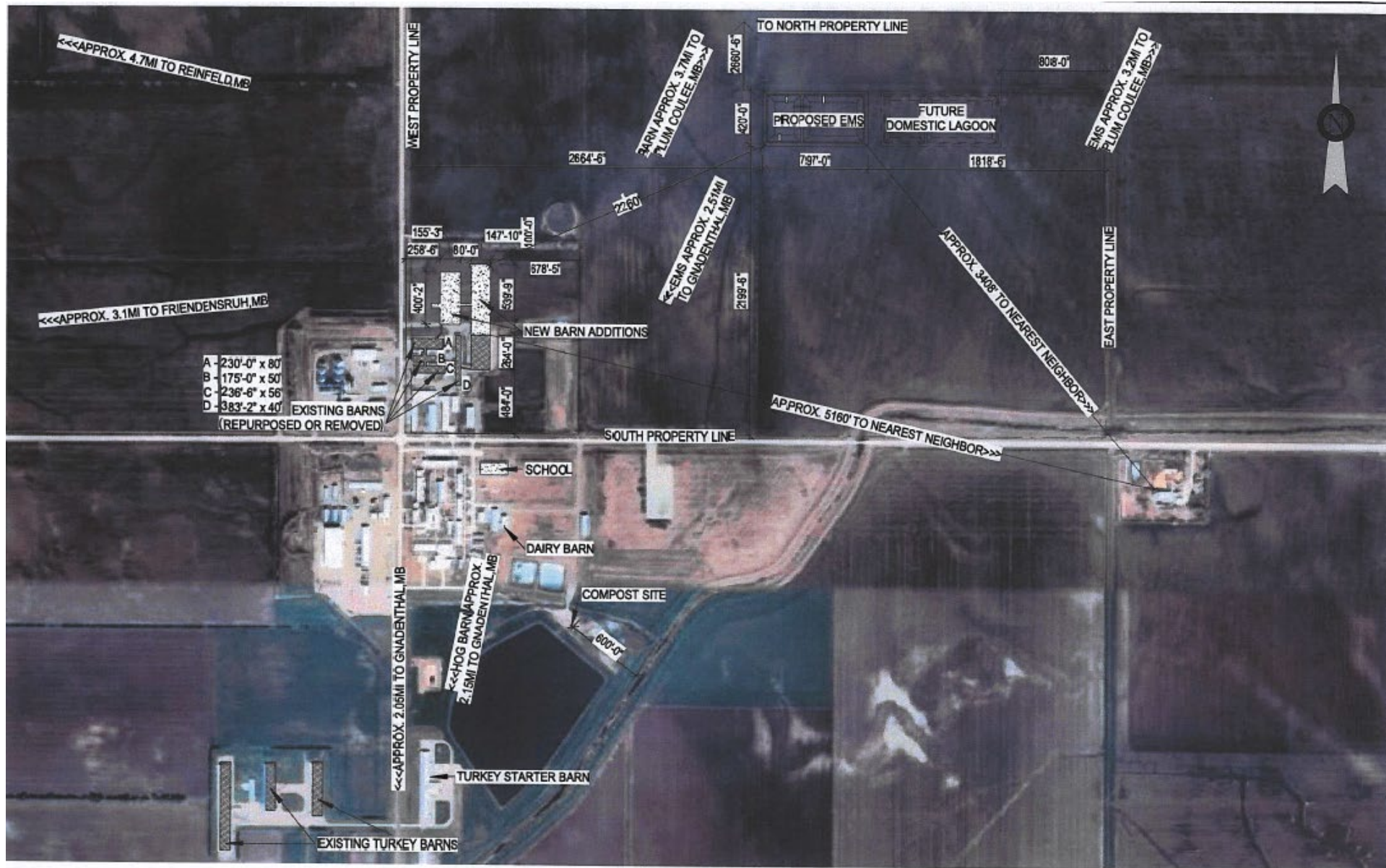
Proposal: The applicant proposes to expand an existing livestock operation. The proposal involves growing the colony hog operation from 600 sows – farrow to partial finish to 1250 sows – farrow to finish and adding 2000 broiler chickens, representing an increase from 1,877 to 2,591 animal units.

This will involve the following:

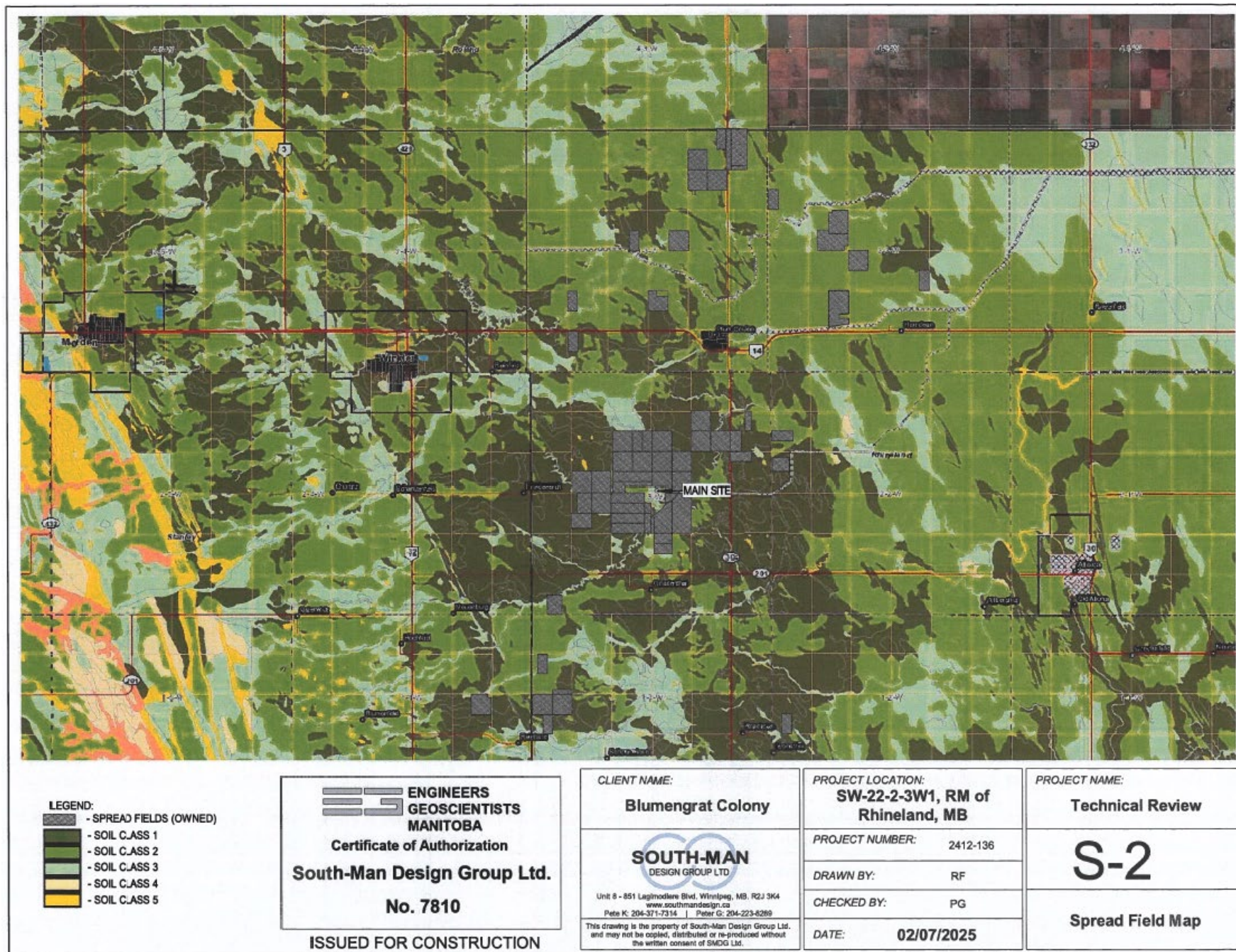
- Replacement or alteration of existing pig barns and construction of two new pig barns;
- Construction of a new earthen manure storage facility;
- Estimated daily water use of 54,002 imperial gallons from piped service;
- Composting and rendering of mortalities; and
- Truck haul routes as shown in map below.



Location Map



Site Map



Spread Field Map



Truck Haul Route Map

C. SITE ASSESSMENT OVERVIEW

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
1	Description of Operation and Nature of Project	<p>The Blumengart Hutterian Mutual Corporation proposes to expand their existing livestock operations by increasing their pigs to 1,250 sows, farrow to finish (1,563 AU) and by adding 2000 broiler chickens (10 AU).</p> <p>The expansion will represent an increase in animal units from 1,877 AU to 2591 AU.</p>	MNR
2	Type and Size of Operation	<p>Blumengart Hutterian Mutual Corporation is seeking Conditional Use approval from the Municipality of Rhineland to expand their pig operation to 1250 sows, farrow to finish and to add 2000 broiler chickens to their existing poultry operations (18,500 layers, 9,500 layer pullets, 30,000 broiler turkeys and 51,800 heavy turkey hens). The proponent has also indicated that they have 8 mature dairy cows plus associated livestock. The total proposed animal units would be 2591 AU.</p>	AGR
3	Animal Confinement Facilities	<p>The proposed expansion will require the construction of two new animal confinement facilities and the alteration of one facility to replace three existing facilities and accommodate the proposed expansion of the pig operation.</p> <p>The construction of two new facilities is proposed with the expansion of the livestock operation. A 79,792 ft² and a 62,126 ft² hog barn are proposed to be constructed and one 18,400 ft² is proposed to be altered. The proposed facilities replace three existing ones (15,326 ft², 13,244 ft² and 8,750 ft²).</p> <p>As all buildings proposed for construction exceed 6,458 ft² (600 m²), building permits must first be issued by MSTW, as required by the Inspection and Technical Services Branch, Department of Labour and Immigration, under Manitoba Building Code Regulation M.R. 78/2023. Please contact MSTW at (204) 822-6223 or check their website at MSTW Planning District Permits.</p> <p>For more information, see the Inspection and Technical Services Branch website: https://www.gov.mb.ca/labour/its/bldg_codes/permits_and_inspections.html</p>	MNR
4	Confined Livestock Areas	The proposed facility is not considered a Confined Livestock Area and is not regulated under the Livestock Manure and Mortalities Management Regulation.	ECC
5	Project Sites Unsuitable for Development	The manure storage facility is not located within Nutrient Management Zone N4 and not in any Nutrient Buffer Zones.	ECC
6	<p>Water Source: Pipeline</p> <p>Water Requirements of 54,002 imperial gallons per day</p>	<p>As the proponent's water supply is sourced from an existing pipeline, the Drainage and Water Rights Licensing Branch (Water Use Licensing Section) has no concerns with the project as proposed.</p> <p>The Pembina Valley Water Co-op has been informed of the application.</p>	ECC

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
7	Development Plan	<p>The Planning Act requires that development plans include a livestock operation policy that guides zoning by-laws dealing with livestock operations.</p> <p>The Planning Act requires that municipalities issue a development permit before any development takes place on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not comply with required separation distances or setbacks must obtain Council approval following public hearing to vary those requirements.</p> <p>Designation</p> <p>The site of the proposed livestock operation, located in the S ½ 22-2-3 WPM in the Municipality of Rhineland, is designated General Agricultural Policy Area (RPGA Development Plan By-law No. 3-2011). The proposal complies with Development Policies 2.39 to 2.3.21 (Livestock Policies).</p>	MNR
8	Zoning By-Law	<p>Zoning</p> <p>The site of the proposed livestock operation is zoned “AG” Agriculture General (Municipality of Rhineland Zoning By-law No. 2021-06) with a minimum site area requirement of 80 acres and a minimum site width requirement of 400 feet.</p> <p>The proposed operation complies with the Zoning By-law.</p>	MNR
9	Separation Distances	<p>The proponents proposed livestock operation expansion meets all the minimum required setbacks and is consistent with <i>6.6 Standards for Livestock Operations</i> and <i>Table 7: Minimum Separation Distances for Siting Livestock Operations</i> in the Municipality of Rhineland Zoning By-law No. 2021-06.</p>	MNR
10	Abandoned Wells	<p>The proposal indicates that water for the proposed livestock operation will be sourced from a public pipeline.</p> <p>The provincial water well database does not show any wells located on the project site or spread fields. The proponent further states that no abandoned wells are present on the project site or spread fields. However, if any abandoned or unused wells are identified in the future, they must be properly sealed and a sealed well report submitted to Manitoba Environment and Climate Change, Groundwater Management Section.</p> <p>For information on well sealing and obtaining a sealed well report, please contact Manitoba Environment and Climate Change at (204) 945-6959 or: https://www.gov.mb.ca/sd/water/groundwater/wells_groundwater/index.html.</p> <p>A well drilling professional should seal all but the most basic wells. A list of currently licensed well drilling professionals can also be accessed from the above web page.</p> <p>During manure spreading, the setback distances to all groundwater features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum required setback distance.</p>	ECC

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
11	Water Control Works	<p>There are no new water control works proposed. If water control works are proposed, an authorization under The Water Rights Act is required.</p> <p>Please note, any filling or draining of regulated wetlands (Class 3, 4 or 5) constitutes the construction of water control works. Also, Class 6, 7 and unimproved organic soils (ag capability) cannot be drained.</p>	ECC
12	<p>Manure Type and Storage:</p> <p>Liquid and solid</p>	<p>Liquid: The proponent will decommission an old manure storage facility.</p> <p>Under the Livestock Manure and Mortalities Management Regulation, the applicant must submit a decommissioning plan to Manitoba Environment and Climate Change for approval prior to starting decommissioning works. The plan must follow the specifications and procedures described in the Technical Reference Documents for Decommissioning Manure Storage Facilities.</p> <p>The proponent will build a new manure storage facility.</p> <p>Under the Livestock Manure and Mortalities Management Regulation, the proponent must obtain a permit from Manitoba Environment and Climate Change prior to building the storage. Once the new facility is in operation, the proponent must:</p> <ul style="list-style-type: none"> • Ensure there is sufficient capacity to store all manure through the winter. • Maintain the structural integrity of the storage facility. • Operate the storage facility so that it does not pollute surface water, ground water, or soil. <p>Solid: The proponent will use an existing manure storage facility that is registered or was constructed under permit.</p> <p>Under the Livestock Manure and Mortalities Management Regulation, the proponent must:</p> <ul style="list-style-type: none"> • Ensure there is sufficient capacity to store all manure through the winter. • Maintain the structural integrity of the storage facility. • Operate the storage so that it does not pollute surface water, ground water, or soil. <p>The proponent will also store solid manure as field storage. Under the Livestock Manure and Mortalities Management Regulation, the proponent must:</p> <ul style="list-style-type: none"> • Locate the manure at least 100 m from any surface watercourse, sinkhole, spring, or well. • Ensure the manure does not pollute surface water, groundwater, or soil. • Land-apply the stored manure the following year. 	ECC
13	<p>Mortalities disposal methods identified:</p> <p>Composting and Rendering</p>	<p>The proponent will compost mortalities. Under the Livestock Manure and Mortalities Management Regulation, the proponent must:</p> <ul style="list-style-type: none"> • Ensure that composting does not pollute surface water, groundwater, or soil. • Locate the composting site at least 100 m from any surface watercourse, well, or operation boundaries. • Ensure the composting facilities and process are acceptable to the director. <p>The proponent will also render mortalities, which is an acceptable method of disposal. The proponent must keep the carcasses secure from scavengers and ensure they are delivered to a rendering plant within four days after death unless refrigerated or frozen.</p>	ECC

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
14	Setback Distances from Manure, Livestock, and Mortalities to Water and Operation Boundaries	The proponent has indicated that all setback distances meet the minimum requirements set out in the Livestock Manure and Mortalities Management Regulation.	ECC
15	Building in Designated Flood Areas or Adjacent to Provincial Water Infrastructure	The project site is not within a Designated Flood Area. Rosenheim Coulee, which runs through the project site, is provincial water infrastructure. Any activities which have the potential to impact provincial water infrastructure will require a provincial water infrastructure permit. This permit must be obtained prior to undertaking any activities which may impact the provincial water infrastructure.	MTI
16	Odour control measures (project site)	The proponent has indicated that shelterbelts will be planted, though no details have been provided. Should odour become a problem for neighbouring residents, there is a complaints process under The Farm Practices Protection Act. A person who is disturbed by any odour, noise, dust, smoke or other disturbance resulting from an agricultural operation may make a complaint, in writing, to the Manitoba Farm Industry Board. The Act is intended to provide for a quicker, less expensive and more effective way than lawsuits to resolve nuisance complaints about farm practices. It may create an understanding of the nature and circumstances of an agricultural operation, as well as bring about changes to the mutual benefit of all concerned, without the confrontation and the expense of the courts.	AGR
		Section 116(1) of The Planning Act allows municipal councils to require a manure storage cover and the planting of a shelterbelt as conditions of approval. The applicant has indicated that trees will be planted to form a shelterbelt to limit air and odour movement.	MNR
17	Land Available for Manure Application	The estimated land requirement for the proposed operation is 3595 acres for the phosphorus excreted by all of the livestock and poultry owned by the Colony, or 3680 acres for the nitrogen, whichever is higher. The proponent has exceeded the land requirement by demonstrating that they have access to 7188 suitable acres. Additional details can be found in Appendix A.	AGR
		The proponent's proposed spread fields are located within the Municipality of Rhineland. All locations are designated General Agriculture or Restricted Agriculture Policy Areas and comply with the respective Livestock Policies (RPGA By-law 3-2011, Policies 2.3.9 to 21.2). The proposed spread field locations are zoned "AG" General Agricultural or "AR" Restricted Agricultural Zone (Municipality of Rhineland Zoning By-law 2021-6) and support existing agricultural activity.	MNR
18	Setbacks for Manure Application	Under the Livestock Manure and Mortalities Management Regulation, manure spreading must meet setback distances to all surface watercourse and groundwater features.	ECC

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
19	Manure Transportation and Application	<p>Please be advised that any structures placed within the controlled area of a Provincial Road (125 ft from the edge of the right-of-way) require a permit from our office. For permit information, please contact Juanita Mowbray at (204) 583-2433 or by email at Juanita.Mowbray@gov.mb.ca. Permit information can also be found at https://forms.gov.mb.ca/highway-permits-application/index.html.</p> <p>The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of any Provincial Trunk Highway (PTH) or Provincial Road (PR) require permission from Manitoba Transportation and Infrastructure's Steinbach Office. Please contact the Regional Planning Technologist, Robert Fender, at (204) 346-6266 or Robert.Fender@gov.mb.ca. In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 306, PR 332, and PR 336 (125 ft from the edge of the right-of-way).</p>	MTI
		<p>Under the Livestock Manure and Mortalities Management Regulation, the proponent must:</p> <ul style="list-style-type: none"> Operate with an annual manure management plan that includes: <ul style="list-style-type: none"> Manure type, volume, and nutrient values Spread field location and soil class Soil tests showing nitrogen and phosphorus levels Crops to be grown Manure application rate Ensure manure does not pollute groundwater, soil, or escape the operation's boundaries. Follow requirements for the land application of manure, including nitrogen limits and phosphorus thresholds. 	ECC
20	Manure Application on Lands Subject to Frequent Flooding or Inundation	The proponent has indicated that some spread fields are located within a regularly inundated area. Under the Livestock Manure and Mortalities Management Regulation, manure applied there between September 10 and November 10 must be injected or incorporated within 48 hours. This does not apply where perennial forages are established or the soil is not disturbed (except for seed planting or commercial fertilizer application) and has adequate crop residue to control erosion.	ECC
21	Projected Truck Haul Routes and Access Points	The proposed truck haul route uses existing municipal roads. MTI has no concerns.	MTI
		<p>The proposed site is accessed by Municipal Road 9 NW.</p> <p>As per Section 116(2) of The Planning Act, municipalities, as a condition of approval, may require proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.</p>	MNR

Related Section in the Site Assessment		Related Provincial Requirements and Safeguards	Dept.
22	Conservation Data Centre Report	<p>Provincial Requirements</p> <p>Known rare species will not be impacted on new site/lands</p> <p>Related Provincial Safeguards</p> <p>The information provided in the assessment suggest that there will not be any conflicts with species protected under the Endangered Species and Ecosystems Act and/or Species at Risk Act or designated as rare or uncommon by the Manitoba Conservation Data Centre (MBCDC).</p> <p>NRIF's review is based on existing data known to the MBCDC of the Wildlife Branch at the time of the review. These data are dependent on the research and observations of our scientists and reflects our current state of knowledge. An absence of data does not confirm the absence of any rare or endangered species.</p> <p>Many areas of the province have never been thoroughly surveyed, however, and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should, therefore, not be regarded as a final statement on the occurrence of any species of concern. All future observations of rare or endangered species made by the proponent should be reported to the MBCDC for further review.</p>	NRIF

Provincial Departments: Agriculture (AGR); Environment and Climate Change (ECC); Transportation and Infrastructure (MTI); Municipal and Northern Relations (MNR); Natural Resources and Indigenous Futures (NRIF)

D. PUBLIC COMMENTS AND DISPOSITIONS

Public Comment Summary	
Andrew, Marianne & Jonas Penner Neighbour	Concern regarding: <ul style="list-style-type: none">• Odour

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at: https://www.gov.mb.ca/mr/livestock/public_registries.html

See Appendix B for the proponent's response to the public comments.

E. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The information contained in the Site Assessment submitted by the proponent generally meets provincial requirements. Based on available information, it has been determined that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards.

Recommended Actions to Council

1. As per Section 114(2) of The Planning Act, at least 14 days before the date of the hearing, Council must:
 - a) send notice of the hearing to
 - i. the applicant,
 - ii. the Minister (c/o the Morden Community Planning Office),
 - iii. all adjacent planning districts and municipalities, and
 - iv. every owner of property located within three kilometres of the site of the proposed livestock operation, even if the property is located outside the boundaries of the planning district or municipality; and
 - b) publish the notice of hearing in one issue of a newspaper with a general circulation in the planning district or municipality or, when there is no newspaper with a general circulation in the area, post the notice in the office of the planning district or municipality and at least two other public places in the district or municipality; and
 - c) post a copy of the notice of hearing on the affected property in accordance with the Posting Requirements outlined in Section 170 of The Planning Act.
2. Council should specify the type of operation, legal land location, number of animals in each livestock category, total animal units, and expiration date (as per Planning Act section 110(1)) in its Conditional Use Order.
3. As per Section 117 of The Planning Act, Council must send a copy of its Conditional Use Order to
 - a) the applicant,
 - b) the Minister (c/o the Morden Community Planning Office), and
 - c) every person who made representation at the hearing.
4. Council may impose on the approval of this application a condition requiring the owner of the project site to enter into a development agreement under Section 116(2)(d) of The Planning Act. Such a development agreement may address matters including:
 - a) The timing of construction (or demolition) of any proposed building, including as it relates to complying with provincial requirements to decommission the existing concrete manure storage facility; and
 - b) The construction and maintenance of shelterbelts.
5. Councils are requested to include in their resolution and/or Conditional Use Order notification that, as per Section 118.2(1) of The Planning Act, an applicant may appeal the following decisions of a board or council to the Municipal Board:
 - b) for an application for approval of a conditional use made in respect of a large-scale livestock operation,
 - i. a decision to reject the application,
 - ii. a decision to impose conditions.

6. As per Section 118, no development or expansion of a livestock operation that is the subject of an application under Part 7, Division 2 of The Planning Act may take place until
 - a) the application is approved and the applicant complies, or agrees to comply, with any condition imposed on the approval under this Division; and
 - b) the applicant obtains every approval, including any permit or licence, required under an Act, regulation or by-law in respect of the proposed operation or expansion, and complies with, or agrees to comply with, any condition attached to the approval.
7. Council is welcome to contact Manitoba Environment and Climate Change, Environmental Approvals Branch or Regional Environmental Compliance and Enforcement staff with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) including compliance and enforcement issues.

Recommended Actions to Proponent

1. That any additional measures identified through subsequent provincial licencing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.
2. That, as per Section 118.2(1)(b) of The Planning Act, an applicant may appeal the following decisions of a board or council to the Municipal Board:
 - b) for an application for approval of a conditional use made in respect of a large-scale livestock operation,
 - i. a decision to reject the application,
 - ii. a decision to impose conditions.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title Branch	Contact
Inonge Aliaga	Municipal and Northern Relations	A/Director <i>Community Planning Services Branch</i>	431-276-9741 inonge.aliaga@gov.mb.ca
Petra Loro	Agriculture	Livestock Environment Specialist <i>Sustainable Agriculture Branch</i>	204-918-0325 petra.loro@gov.mb.ca
Julie Froese	Environment and Climate Change	Environmental Livestock Coordinator <i>Environmental Approvals Branch</i>	204-945-7104 julie.froese@gov.mb.ca
Colin Murray	Natural Resources and Indigenous Futures	Information Manager- Manitoba Conservation Data Centre <i>Fish and Wildlife Branch</i>	204-945-7760 colin.murray@gov.mb.ca
Jeff DiNella	Transportation and Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-430-7176

Appendix A

Manitoba Natural Resources and Indigenous Futures, Lands and Planning Branch

A review of the information provided suggests there is no impact to Crown land administered under The Crown Lands Act. This review is based on information known to the Lands and Planning Branch as documented in the Crown Lands Registry System.

Manitoba Agriculture, Sustainable Agriculture Branch

In areas of lower livestock intensity, such as the Municipality of Rhineland, it is currently the Province of Manitoba's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in areas of lower livestock intensity to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future.

Typical, modern feeding practices for poultry, pigs and dairy cattle were used to estimate nutrient excretion by the livestock at Blumengart Hutterian Mutual Corp. Six-year crop yield averages from the Manitoba Agricultural Services Corporation (MASC) for the Municipality of Rhineland were used to estimate crop nitrogen uptake and phosphorus removal rates for the crop rotation specified in the proposal.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. Soils must be below 60 ppm Olsen P to be considered suitable. Detailed soil survey is available in the area to determine the agriculture capability of the land. The soil survey indicates the land is predominantly Classes 1 to 3 (prime agricultural land) with a small amount of class 5. The most significant limitations in the area are wetness (W) salinity (N) and inundation (I) with smaller areas of slope (T) and moisture (M).

The estimated land requirement for Blumengart Hutterian Mutual Corp. is 3595 acres for the phosphorus or 3680 acres for the nitrogen, whichever is higher. Blumengart Hutterian Mutual Corp. has exceeded the land requirement by demonstrating that they have access to 7188 suitable acres.

Manitoba Environment and Climate Change, Water Science and Watershed Management Branch

Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2001).

The proponent is planning to apply manure in fall by either full injection (liquid manure) or broadcast and incorporated within 48 hours (solid manure). Full injection and broadcast with incorporation will reduce the risk to surface water when compared to broadcast only application methods.

For most crops, manure contains an excess of phosphorus (P) compared to nitrogen (N) and as a result, application at N-based rates causes a buildup of soil P. Practices which reduce N losses from the manure improve the N:P ratio in the manure and help slow P buildup when manure is applied at N-based rates. Injection and incorporation are both practices which reduces N loss when compared to broadcast only application methods.

The Province of Manitoba has included phosphorus as a nutrient by which fertilizer application through manure, synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. Many

agricultural soils in Manitoba, especially areas with low livestock intensity, are considered phosphorus deficient and therefore, manure is an ideal fertilizer to support crop production. However, manure application can increase soil phosphorus over time and other spread fields may need to be added to prevent excessive soil phosphorus build up. As excess phosphorus levels build up in soils, greater losses occur to surface and ground water. It should be noted that Olsen soil-test phosphorus levels of 60 ppm are well above phosphorus needs for most crops (over 20 ppm is usually considered agronomically very high). In areas of lower livestock intensity, such as the Municipality of Rhineland, it is currently the Province's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future for long-term sustainability. To remain environmentally sustainable over a long-term planning horizon of 25 years or more the proponent acknowledges that 7188 acres may be required for the operation. The proponent has identified 7885 acres with suitable soil test for manure application at this time. Application to meet crop N requirements is estimated to use 3680 acres. Application at 2 times the crop removal of P is estimated to use 3594 acres (7188 acres is estimated to achieve P balance [phosphorus removal equal to phosphorus application] with current crop choices and yield potential).

As phosphorus levels build up in soils, the concentration of phosphorus in runoff to surface waters increases. It is important to rotate manure application across all spread fields and whenever possible focus manure applications on fields with low Olsen-P soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. Setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface and groundwater. During manure spreading, setback distances to all groundwater features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.

Appendix B



Unit 8 – 851 Lagimodiere Blvd, Winnipeg, MB R2J 3K4
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Ph : (204) 223-8289

In response to comments submitted by Andrew Penner the following information has been prepared in consultation with Blumengart Colony and is submitted on their behalf:

- 1) The proposed hog barn additions as indicated, will in fact be constructed further away from the residence than the existing buildings.
- 2) The site proposed for the EMS is situated outside the provincial setback requirements for the size of operation proposed. These distances were determined to mitigate the potential for odour impacts taking into consideration that all odour occurrences are not avoidable. The current location also utilizes previously planted shelterbelts to the west and north of the facility. These shelter belts will be maintained to reduce wind speed and odour transfer but also to reduce the potential for erosion of the clay liner.
- 3) Utilization of straw covers has been tried in the past with limited success at a significant cost. Straw covering systems are extremely susceptible to damage and degradation as they can easily be displaced by wind and submerged with wave action and/or extreme or prolonged precipitation events. This will be increasingly more likely to occur given the size and exposed surface area of the proposed storage. The addition of straw to the storage also requires more aggressive and a prolonged period of agitation to break down the straw so that it can be handled as a liquid for direct injection and to prevent solids accumulations within the storage. During the emptying process of the storage each fall is when the maximum odour production is experienced. This emptying process would be expected to be extended by 3-4 days if required to manage a straw cover, thus resulting in higher intensity odour for a longer period of time.

Respectfully submitted,

Blumengart Colony